

IN THE CLAIMS

The following is a complete listing of the claims, and replaces all earlier versions and listings.

1. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate involves the following steps in turn comprising:

- (1) Load the loading a material comprising arsenic gold ore concentrate and iron powder into [[the]] a smelting chamber; [.]
- (2) Increase increasing the temperature of the smelting chamber to 100°C-300°C and then hold the holding that temperature to remove [[the]] vapor and a small quantity of dust [[in]] from the material; [[.]]
- (3) Under increasing, under residual pressure ≤ 50 Pa, increase the temperature of the smelting chamber and the temperature of a crystallization chamber to 300-500°C and then hold the holding the increased temperatures to remove [[the]] volatilized arsenic sulfides [[in]] from the material; [[.]]
- (4) Hold holding the temperature of the crystallization chamber at 300-500°C, and increase increasing the temperature of the smelting chamber to 500-600°C and then hold the holding that temperature to remove [[the]] decomposed gaseous element sulfur decomposed from the material; [[.]]
- (5) Increase increasing the temperature of the smelting chamber to 600-760°C and then hold the holding that temperature, meanwhile lower while lowering the temperature of the crystallization chamber to 270-370°C and then hold the holding that temperature to let the allow arsenic vapor generated from the material to crystallize in the crystallization chamber

and get element obtain arsenic and also get gold-rich slag after dearsenization at the bottom of the smelting chamber; [[.]]

(6) Lower lowering the temperatures of the smelting chamber and the crystallization chamber to below 150°C, charge the charging air into an air charging valve, and, when [[the]] inside and outside air pressures are approximately basically equal, [[strip]] stripping the arsenic, and [[take]] taking out the gold-rich slag after dearsenization; and [[.]]

(7) Extract extracting fine gold from the gold-rich slag got using conventional method.

2. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate as mentioned in Claim 1, featuring that further comprising the step of crushing, before the material is charged into the above mentioned smelting chamber, there is a step to crush the arsenic gold ore concentrate material into a grain size of 0.1mm-2mm.

3. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate as mentioned in Claim 1, featuring that in which the weight of above mentioned iron powder is 2-4% of arsenic concentrate material.

4. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate as mentioned in Claim 1, featuring that in which the temperature of the smelting chamber in step (2) is held for a holding time [[is]] of 1-2 hours in the above step (2).

5. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate as

mentioned in Claim 1, featuring that in which the temperature of the smelting chamber and the temperature of the crystallization chamber in step (3) are held for a holding time [[is]] of 1-2 hours in the above step (3).

6. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate as mentioned in Claim 1, featuring that in which the temperature of the crystallization chamber and the temperature of the smelting chamber in step (4) are held for a holding time [[is]] of 1-3 hours in the above step (4).

7. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate as mentioned in Claim 1, featuring that in which the temperature of the smelting chamber and the temperature of the crystallization chamber in step (5) are held for a holding time of smelting chamber and crystallization chamber is respectively 3-7 hours in the above step (5).

8. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate as mentioned in Claim 1, featuring that in which the temperature of the smelting chamber in the above mentioned step (2) is 200-300°C.

9. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate as mentioned in Claim 8, featuring that in which the temperature of the smelting chamber in the above mentioned step (2) is 250-300°C.

10. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate as

mentioned in Claim 1, ~~featuring that in which the temperature of the smelting chamber in the above mentioned step (3) is 450-500°C.~~

11. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate as mentioned in Claim 1, ~~featuring that in which the temperature of the crystallization chamber in the above mentioned step (3) is 400-450°C.~~

12. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate as mentioned in Claim 1, ~~featuring that in which the temperature of the smelting chamber in the above mentioned step (4) is 550-600°C.~~

13. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate as mentioned in Claim 1, ~~featuring that in which the temperature of the crystallization chamber in the above mentioned step (4) is 400-450°C.~~

14. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate as mentioned in Claim 1, ~~featuring that in which the temperature of the smelting chamber in the above mentioned step (5) is 650-750°C.~~

15. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate as mentioned in Claim 14, ~~featuring that in which the temperature of the smelting chamber in the above mentioned step (5) is 700-750°C.~~

16. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate as mentioned in Claim 1, featuring that in which the temperature of the crystallization chamber in the above mentioned step (5) is 300-360°C.

17. - 31. (Canceled)